

WHAT IS CLAIMED IS:

1. An intraocular lens for increased depth of focus, comprising:
single solid flexible optic having a thickness substantially less than a natural human lens, and at least two solid rigid haptics connected with the flexible optic, said lens being longitudinally flexible for bending for insertion into an eye and is adapted to be posteriorly positioned in the capsular bag of the eye, whereby light refracted by the cornea travels substantially farther to the optic than with a natural optic and a substantially smaller cone of light passes from the optic to the retina to provide substantially increased depth of focus.
2. A lens according to Claim 1, wherein the optic is about 1.0 mm in thickness.
3. A lens according to Claim 1, wherein the lens is posterior vaulted and the optic has a thickness between 0.5 mm and 1.5 mm.
4. A lens according to Claim 1, wherein the haptics are rigidly connected with the optic and extended therefrom.
5. A lens according to Claim 1, wherein the lens is configured to vault posteriorly in the capsular bag of the eye.

6. A lens according to Claim 4, wherein the lens is configured to vault posteriorly in the capsular bag.

7. A lens according to Claim 4, wherein the optic has a thickness between 0.50 mm and 1.5 mm.

8. A lens according to Claim 5, wherein the optic has a thickness between 0.60 mm and 1.5 mm.

9. A lens according to Claim 4, wherein:
the rigid lens is configured to move anteriorly for near vision and posteriorly for far vision by changes during contraction and relaxation of the ciliary muscle.

10. A lens according to Claim 9, wherein:
the rigid lens is adapted to be disposed within the capsular bag and is configured to move about 1.0 mm between their far and near vision positions, whereby the optic is positioned about 1.0 mm further anteriorly than posteriorly to provide improved near vision.

11. An intraocular lens for increased depth of focus, comprising:
a single solid flexible optic having a thickness substantially less than the thickness of a natural human lens, and

two solid and rigid haptics rigidly connected to the optic and extending therefrom;

said lens being longitudinally flexible through the optic for bending for insertion into an eye and configured to vault posteriorly in the capsular bag to position the optic farther from the cornea of the eye,

whereby light refracted by the cornea travels substantially farther to the optic than with a natural optic and a substantially smaller cone of light passes from the optic to the retina to provide substantially increased depth of focus.

12. A posteriorly vaulted and rigid lens according to Claim 11, wherein the optic has a thickness between 0.5 mm and 1.5 mm.

13. A posteriorly vaulted lens according to Claim 11, wherein:
the lens is adapted to be moved anteriorly for near vision and posteriorly for far vision by changes in pressure within the eye.

14. A posterior vaulted lens according to Claim 12, wherein:
the lens is moved anteriorly for near vision and posteriorly for far vision by changes in pressure within the eye.

15. A lens according to Claim 13 wherein:

the intraocular lens is configured such that redistribution of ciliary muscle mass upon constriction of the muscle for near vision causes encroachment thereof on the vitreous cavity and an increase of pressure therein to aid in urging the rigid lens anteriorly to enhance near vision.

16. A lens according to Claim 13, wherein:

the lens is configured such that the peripheral equator of the capsular bag and the rigid lens therein are adapted to move about 1.0 mm between their far and near vision position, whereby the optic is positioned about 1.0 mm further anteriorly than posteriorly to provide improved near vision.

17. A lens according to Claim 11, wherein:

a peripheral equator of the capsular bag and the rigid lens therein are moved forward between their far and near vision positions, whereby the optic is positioned further anteriorly than posteriorly to provide improved near vision.

18. A lens according to Claim 4, and further comprising at least one rigid bar secured to and extending longitudinally of the lens to provide rigidity.

19. A lens according to Claim 11, and further comprising at least one rigid bar secured to and extending longitudinally of the lens to provide rigidity.

20. A lens according to Claim 19, wherein two rigid bars are disposed in spaced relation and extend longitudinally of the lens.